

IN THE SPECIFICATION:

Page 1 after title, please insert the following subheading:

--FIELD OF THE INVENTION--

Page 1 after the first paragraph, please add the following subheading:

--BACKGROUND OF THE INVENTION--

Please replace the paragraph on page 2, which starts "US 3,645,700" with the following:

US 3,645,700 provides an improved vessel for fluidised bed reactions, characterised by the provision of metal or non-metal projections of various shapes at calculated intervals on the internal side wall of the vessel. US 3,645,700 thus teaches the prevention of wear of the internal surface of the wall by contacting the projections with the fluidised solid particles, whereafter the solid particles are deflected from the projections without directly contacting the reactor wall. This document is thus not concerned with solid objects whirling around in an annular zone or with reducing the movement of the tile or brick layer and the underlying catalyst of a fixed bed reactor. US 5,016,576 discloses a combustion chamber for combusting fine-grained fuels in a fluidised bed. The combustion chamber has a refractory lining provided at its top end with a cornice, which is enlarged in width. The method employed by ~~Ð2~~ US 5,016,676 is to build up a protective body or bed of the fuel solids on the cornice covering the most highly endangered region of the combustion chamber wall and the

use of a cornice as described in US 5,016,576 will not solve the abovementioned problems. DE 3117195 discloses a process and apparatus in which the heat, material and momentum exchange in the direct vicinity of the wall of a fluidised bed reactor is reduced. This is achieved by increasing the flow resistance for the fluid in the vicinity of the wall to such an extent that in this area the fluidised bed is no longer boiling. DE 3117195 thus does not deal with solid objects whirling around in an annular path nor with the unwanted movement of catalysts in a fixed bed nor the movement of the tile or brick layer above the catalyst bed. JP 08110007 relates to a heat exchanger which includes tube walls and loop pipes and discloses the use of an erosion baffle to prevent excessive abrasion of the bent ends of the loop pipes by coal ash. JP 08110007 does not propose a solution for dealing with solid objects whirled around in an annular zone against the interior surface of a process vessel. US 4,954,402 discloses a retarder for preventing the erosion of refractory material at a refractory corner over which fluid flows. The retarder is embedded within the refractory material and US 4,954,402 thus does not propose any solutions to the abovementioned problems.

Before the first paragraph on page 3, please insert the following subheading:

--SUMMARY OF INVENTION--

Please replace the third paragraph on page 6, which starts "A ratio between" with the following:

A ratio between the depth or thickness of the bricks or tiles having an increased depth or thickness to the depth or thickness of the other bricks or tiles in the layer may be between  $\frac{1}{5}1.5:1$  and  $2:1$ . Preferably, the ratio is between  $\frac{1}{8}1.8:1$  and  $\frac{1}{9}1.9:1$ . In one embodiment, the ratio is between  $\frac{1}{82}1.82:1$  and  $\frac{1}{84}1.84:1$ , e.g.  $\frac{1}{83}1.83:1$ .

Please replace the second paragraph on page 8, which starts "Each replacement" with the following:

Each replacement brick or tile of standard depth may have the same nominal diameter, a ratio between the nominal diameter and a thickness or depth of each replacement brick or tile of standard depth being between  $4:1$  and  $1:1$ .

Preferably, the ratio between the nominal diameter and the thickness or depth of these replacement bricks or tiles are between  $3:1$  and  $2:1$ , e.g.  $\frac{2}{5}2.5:1$ . By nominal diameter is meant the diameter of a circle on which the extremities of each replacement brick or tile fall in plan view.

Please insert the following subheading before paragraph 6, which starts "Referring to Figure 1".

#### --DETAILED DESCRIPTION OF THE INVENTION--

Please replace the seventh paragraph on page 9, which starts "The reformer" with the following:

The reformer 10 includes a body 16 which includes a refractory layer 18 defining an interior vessel surface 20. Retaining means, in the form of a horizontally extending brick or tile layer 22, rests on the catalyst bed 12 for retaining the catalyst bed 12 in position in use. The reformer 10 has an internal diameter of ~~2.104m~~ 2.104m.

Please replace the third paragraph on page 10, which starts "Each hexagonal brick" with the following:

Each hexagonal brick or tile 24 has a nominal diameter of 300mm and a thickness or depth of 120mm. Thus, a ratio between the diameter and the depth of each brick or tile 24 is ~~2.5:1~~ 2.5:1. Nineteen circular cylindrical passages 30 extend respectively between openings in a top surface and openings in a bottom surface in each brick or tile 24 (not shown in Figure 2). The centres of the passages 30 are spaced 55mm apart from each other. Thus, the passages are arranged in a regular hexagonal layout. The percentage of the top surface area of each apertured brick or tile 24 occupied by the openings of the passages 30 is ~~25.8%~~ 25.8%. However, seven centrally located regular hexagonal tiles or bricks 32 do not have any passages extending through them.